IN THE CLAIMS

Claims 1-13. (Canceled).

Claim 14. (Currently Amended) An optical device for a helmet viewfinder presenting a collimated image to a user, comprising:

an imager and an off-axis spherical concave mirror forming a first intermediate image; and

a diffractive field mirror for correcting distortion of an image presented to the user which is due to the off-axis spherical concave mirror,

wherein the distortion corrected by the diffractive field mirror is an off-centering distortion of the second kind corresponding to an absence of symmetry of revolution caused by the spherical concave mirror being viewed at an oblique angle with respect to an axis of the spherical concave mirror, and

wherein the diffractive field mirror is situated in a vicinity of a second intermediate image reflected by said diffractive field mirror, the vicinity having an extent limited to a maximum distance of the image beyond which resolution of the image at a center of a field of the device is degraded.

Claim 15. (Canceled).

Claim 16. (Currently Amended) The device as claimed in claim ~~15~~ 14, wherein the diffractive mirror is placed said maximum distance from the intermediate image.

Claim 17. (Previously Added) The device as claimed in claim 14, wherein the diffractive field mirror is a digital plane numerical hologram with discrete variations.

Claim 18. (Previously Added) The device as claimed in claim 14, wherein the diffractive field mirror is a plane numerical hologram with a continuous profile.

Claim 19. (Previously Added) The device as claimed in claim 17, wherein a face of a support of the diffractive field mirror in which the hologram is made is not planar.

Claim 20. (Previously Added) The device as claimed in claim 14, wherein the diffractive field mirror is a volume hologram recorded in a photosensitive material.

Claim 21. (Previously Added) The device as claimed in claim 20, wherein the photosensitive material is on a transparent support of variable optical index.

Claim 22. (Previously Added) The device as claimed in claim 20, wherein the photosensitive material is on a transparent support of variable thickness.

Claim 23. (Currently Amended) The device as claimed in claim 14, further comprising a power group placed between the spherical mirror and diffractive mirror which focuses ~~a~~ the first intermediate image in proximity to said spherical mirror onto ~~a~~ the second intermediate image.

Claim 24. (Canceled)

Claim 25. (Previously Added) The device as claimed in claim 14, further comprising one or more optical power groups or optical relay groups placed in a path of rays between the imager and the spherical mirror, upstream and/or downstream of the diffractive mirror, the one or more optical power groups comprising one or more lenses, at least one lens of which is convergent so as to give an aperture of the beams incident on the diffractive mirror which is smaller in comparison with an aperture of the beams incident on the spherical mirror.

Claim 26. (Previously Added) The device as claimed in claim 14, wherein the spherical mirror is semi-transparent.--

Claim 27. (New) An optical device for a helmet viewfinder presenting a collimated image to a user, comprising:

an imager and an off-axis spherical concave mirror;

a diffractive field mirror for correcting distortion of an image presented to the user which is due to the off-axis spherical concave mirror; and

a power group placed between the spherical mirror and diffractive mirror which focuses a first intermediate image in proximity to said spherical mirror onto a second intermediate image.

Claim 28. (New) The device as claimed in claim 14, wherein the diffractive field mirror is disposed so as to be antiparallel with the second intermediate image.